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4.—PYLON OF AMENHETEP III AT KARNAK, SHEWN IN TUTONKHAMEN'S PROCESSION, LUXOR TEMPLE.

ANCIENT EGYPT.

ORIGIN OF THE GREAT HYPOSTYLE HALL AT KARNAK.

There seems to be a good deal of uncertainty in the text and guide books as to the name of the founder of the Great Hypostyle Hall at Karnak. One authority says that Ramesses I set up one column, Seti I, 79, and Ramesses II, 54; another says that it was founded by Haremhab and so far finished in the time of Ramesses I that he was able to put his name on one column;¹ a third merely states that Seti I used the pylon ("No. III") of Amenophis III as the back to his Hall of Columns.

Though future excavation and possibly fresh documentary matter may settle the attribution once and for all, we have already two pieces of evidence which, to my mind, throw a great deal of light on it. Up to the present, I have not seen them brought forward together.

In the inscription of Amenophis III on the east face of Pylon III at Karnak, shewn in Fig. 1, he tells how magnificently he decorated it. The inscription is very imperfect as the pylon is in ruins, only the ends of each of its 71 columns of inscription being left. After a long speech of praise to Amen-Rê, followed by an account in general terms of his gifts to the god, the king describes the decoration of the pylon. Columns 53-57 are as follows (BREASTED, *Ancient Records*, II, p. 368).

- (53)————— great doorway of electrum.
- (54)————— of the land that sees it, every land [—————].
- (55)————— as leader of them in
- (56)————— of new cedar of the royal domain.
- (57)————— august——— of electrum, obelisks
- (58)—————

Fig. 2, at A, shews the lines containing the word for obelisks, , *thn*. The determinative and dual sign were at the beginning of the next line, and therefore missing, but the word is quite certain. There is no reason to believe that these

¹ I have vainly hunted for hours for the cartouche, or other name, of Ramesses I, armed with the names of all the Ramessides arranged in tabular form. In the superimposed cartouches, I am convinced that it does not occur. M. Munier, of the Cairo Museum Library, has kindly enquired into this matter for me, and finds that the original statement comes from Mariette Pasha, in his *Karnak, texte*, p. 24, where he remarks, "Ramsès Ier a commencé la décoration du pylône, dont il avait déjà conçu le plan. Bien plus, le travail de la Salle Hypostyle était commencé et une colonne au moins était debout quand Ramsès Ier mourut." It is possible we have here a slavish copying by subsequent writers without verification.

obelisks were the miniature ones which were placed on the barge of Amûn, since they would necessarily follow a description of such a barge (*cf.* Breasted, *Ancient Records*, p. 359). Prof. J. H. Breasted, in his translation of the inscription of Pylon III, appends the following footnote on the subject of the destination of these obelisks, which no longer stand before the pylon :—" These obelisks probably stood in front of this pylon (III) ; they must have been removed to build the great hypostyle ; the only obelisks of Amenhotep III now known at Karnak are in the northern temple, but only fragments have survived (Lepsius, *Denkmäler*, Text III, 2). Perhaps they stood on the two bases referred to in Baedeker's *Egypt*, 1902, 253." (Fig. 3.)

The second piece of evidence is in the colonnade of Luxor Temple where Tut'ankhamûn, in the celebrated reliefs of the procession (probably representing the rejoicings at the return to the old worship of Amûn after the 25 years' heresy),

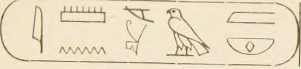
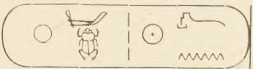


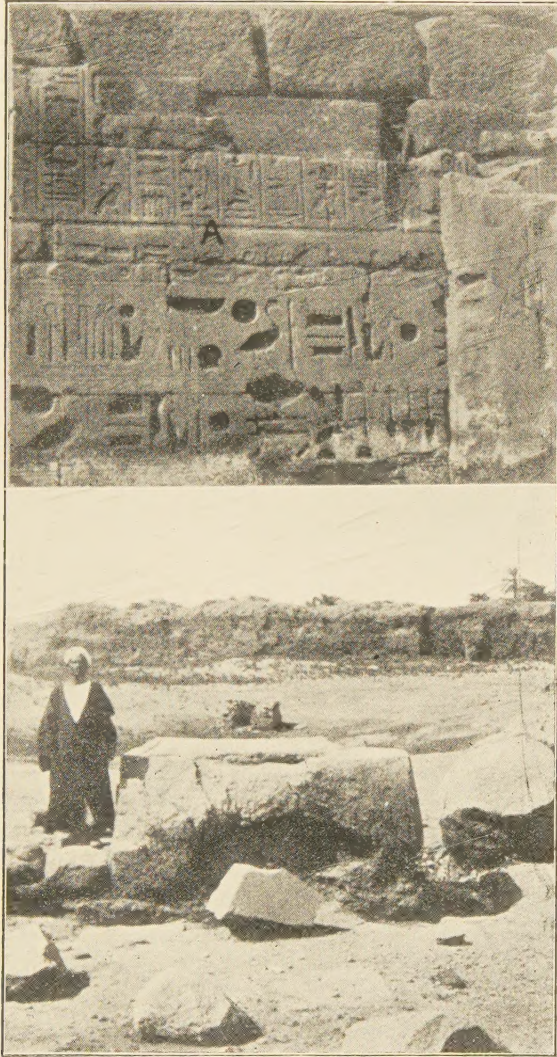
I.—INSCRIPTION OF AMENHETEP III, EAST FACE PYLON III, LUXOR.

gives two views of the main pylon at Karnak, which at that time was Pylon III, with great detail as regards the gateway and the eight flagstaves with their clamps ; but no obelisks are shewn. A photograph of this part of the relief is shewn in Fig. 4, frontispiece.

During the heresy, there was certainly no work done in the temple of Amûn, yet the obelisks once there—if we are to believe the pylon inscription quoted—have disappeared. There is no reason to believe that they were thrown down by Akhenaten, as the others were left standing and were not tampered with except in removing the name of Amûn.

I think that it is generally admitted that the sculptures on the walls of the Great Colonnade in Luxor Temple are the work of Tut'ankhamûn

and not of Haremhab, but Fig. 5 which was taken at the moment the sun touched the cartouches of the king, and which shows Haremhab's names,  and , superimposed on Tut'ankhamûn's  leaves no doubt on this attribution. The two 's and the  at the bottom of the left-hand cartouche are still clearly visible.



2.—INSCRIPTION, PART OF FIG. 1.

3.—BASE OF OBELISK, KARNAK.

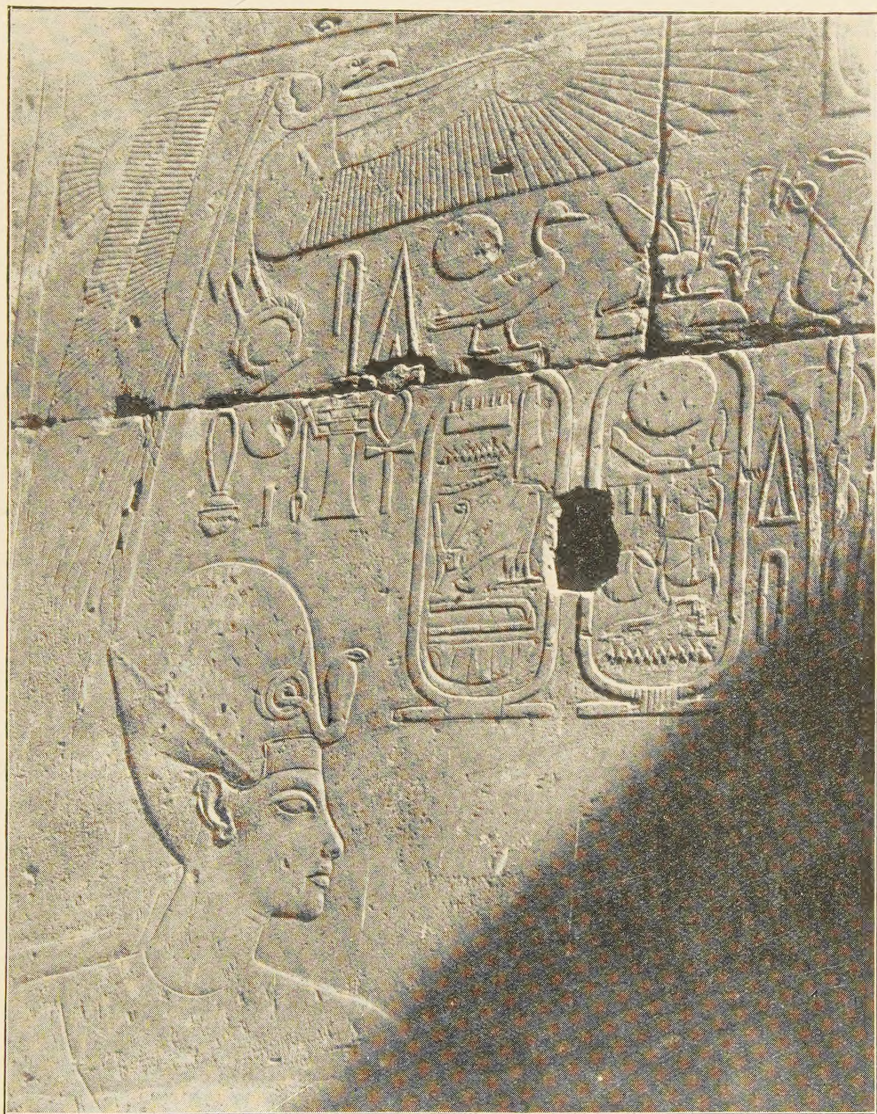
The only reasonable conclusion we can come to is that Amenophis III took down his own obelisks from before Pylon III at Karnak. We will defer for a little the discussion on the destination of these obelisks, confining ourselves to the possible reason for the king's action. The only reason which, to my mind, would lead the king to remove a pair of obelisks from the premier position in Upper Egypt would be that he had a further building in his mind in front of the pylon.

This could be no other than the Great Hypostyle Hall, or at least its two axial lines of columns, a piece of work far more in keeping with this king's character, than that of Haremhab, since the latter's building activities were small. We do not know that he even built a mortuary temple, and all that he seems to have done at Karnak is to have converted a solar temple of Akhenaten into his southern pylon, and to have restored the southern gateway. Backed by the evidence already brought forward, the attribution becomes almost a certainty when we remember that the Great Colonnade at Luxor Temple was at least begun by Amenophis III. Again, I believe that this is a generally accepted fact, since there is nothing known about Tut'ankhamûn which would lead us to suppose that he would undertake and complete such a gigantic piece of work.

Assuming, then, that Amenophis III, at his death, had made considerable progress in what is now the Great Colonnade at Luxor, and had at least laid the foundations of his new building in front of Pylon III at Karnak, it might be well to speculate whether the new buildings in *both temples* were intended for colonnades like that at Luxor or hypostyle halls as at Karnak. Excavation in the floor of them may throw some light on this point, especially outside the screen-walls of Luxor Colonnade. It has been supposed by some that the original idea of Amenophis III at Luxor was for a hypostyle hall similar to that of Karnak, and that Tut'ankhamûn rather than complete such a gigantic piece of work, finished it quickly by putting screen walls on either side of the central lines of columns which he had completed. It seems more likely to me that the inverse is the case, and that the original idea in both temples was for a simple colonnade with screen walls and that Seti I at Karnak transformed an either complete, or partially complete, replica of the Luxor Colonnade into the Great Hypostyle Hall as we now see it. In Karnak, where each successive king built additions irrespective of whether they were suitable or not, any form of building might be expected, but at Luxor the case seems to be different. Here the temple up to the time of the heresy was of one date, being entirely built by Amenophis III, though possibly on the foundations or plan of an earlier temple. I doubt very much whether King Amenophis III would have added a broad, dark, impressive hall in front of the open forecourt of his own temple; a colonnade merely connecting two gateways, however, is not so unlikely. It is, however, rather unwise to reason on the tastes of a people who painted in gaudy colours statues and the most exquisite sculptures, and even gold-plated the rough flagstaves which stood in front of the pylons. A further indication that colonnades was intended is gained by considering the method by which a series of columns were erected. It is generally believed that the corresponding drums of all the columns required were laid simultaneously and that earth was filled round them, with a ramp leading up to the new level, and a further series of drums added to each, continuing the process of filling until the roof-level was reached. Had Tut'ankhamûn found a hypostyle hall in process of construction at Luxor, all the columns would have been at the same level, and it would have been a very big undertaking indeed to transform it into a walled colonnade. To complete a simple colonnade would be a piece of work more likely to have been done by him, especially if Amenophis III left it nearly finished. Although Haremhab and Ramesses I are, to my knowledge, not mentioned in connection with the building of the Hypostyle Hall at Karnak, I think it is fairly sure that they did carry on the work, since Haremhab at any rate—a fervent devotee of Amûn—would not have left an unfinished building at the main gate of Karnak, while he built a pylon and restored the great southern gateway. It seems likely that, at the death of

Ramesses I, the colonnade was practically complete. I admit that my belief, that colonnades and not hypostyle halls were intended, is based on rather slender foundations, and that it may be disproved by those who have more leisure and opportunity than I to give the problem a detailed study.

Returning to the destination of Amenophis III's obelisks at Karnak ; we can at once rule out the possibility that they were transferred to the temple of Amenophis III dedicated to the god Monthu, which lies in a separate enclosure to the



5.—HEAD OF TUTONKHAMEN, CARTOUCHES USURPED BY HOREMHEB.

north of the main temple there. The bases of these obelisks, one of which is given in Fig. 3, shew that the obelisks themselves were not more than some 55 feet high—that is, smaller than the pair of Tuthmôsis I *behind* Amenophis III's pylon. Not only would they have been too small for such a large pylon, but the tendency of successive kings seems to have been to erect obelisks larger than their predecessors unless there was a good reason to the contrary. It is very unlikely that a king

like Amenophis III would have put smaller obelisks than those of Tuthmôsis I and III at the main entrance to Karnak temple. If he had taken them down and left them lying before the pylon now known as Pylon II, Seti I would certainly have erected them, and even if Seti I had died before they could be erected, Ramesses II would have usurped them and left them there with his colossi; it is very unlikely that Ramesses II would have removed them from here to his addition to Amenophis III's temple at Luxor. There are, of course, such possibilities as the destruction of these obelisks, or their removal to other towns, but there are two contemporary records which, at least, offer material for consideration. The black granite stele now known as the "Israel Stele,"—which was removed from the temple of Amenophis III behind the colossi by Merneptah, describes the decoration of both Pylons of the Colossi Temple and of Pylon III at Karnak, but no obelisks are mentioned in connection with either. The only indication as to its date is that it is after Amenophis III's first victorious campaign into the land of Kush, which occurred in the fifth year of his 36-year reign. Another stele of sandstone, of gigantic size, now lying broken behind the Colossi, describes the mortuary temple of Amenophis III which once stood there. In this, unlike the Israel Stele, it is distinctly stated that the pylon of this temple on the *west* bank was furnished with obelisks. It appears that this stone is later than the Israel stele since in the latter the colossi are not mentioned¹ (Breasted, *Ancient Records*, II, p. 356), whereas in the sandstone stele they are very much praised, and are described as "statues of a mountain of gritstone. When they are seen in their places, there is great rejoicing because of their size." (B.A.R., II, pp. 369-370.)

A conclusion that meets all the observed facts is that Amenophis III, after having begun on the foundations of the new building in front of Pylon III at Karnak, took his obelisks over to his mortuary temple on the west bank, having possibly ordered a new pair to be cut for the new main pylon or gateway, which was either finished or converted by Haremhab, Ramesses I and Seti I, and is now Pylon II. The sequents of events in the three temples may have been somewhat as follows, though I give my proposal with a good deal of diffidence:—

- (1) Amenophis III completes his mortuary temple and the third Karnak pylon not long after the fifth year of his reign.
- (2) The stele, now known as the Israel stele, is set up in the mortuary temple before the colossi on the west bank or the obelisks of Pylon III had been erected.
- (3) The obelisks of Pylon III are set up.
- (4) The inscription of Pylon III is cut.
- (5) An interval of some 20 years elapses, during which period the Luxor temple is built and the Colossi erected.
- (6) The colonnade of Luxor Temple is begun.
- (7) The obelisks from Pylon III are taken down and sent over to the mortuary temple behind the Colossi.
- (8) The great Sandstone stele is set up in the above temple.
- (9) The foundations, at least, of a colonnade in front of Pylon III are laid.
- (10) Amenophis III dies, the Luxor Colonnade being nearly finished.

¹ To me it is incredible that such monuments could be included in the description "It is numerous in royal statues of Elephantine granite and of *costly gritstone*, established as everlasting works."

- (11) 25 years' heresy, during which no works are done for the temples of Amûn.
- (12) Tut'ankhamûn finds the Luxor Colonnade almost complete and inscribes it with the procession scenes.
- (13) Haremhab usurps Tut'ankhamûn's cartouches in the above reliefs.
- (14) ¹Haremhab and Ramesses I carry on the colonnade begun in front of Pylon III ; it is not clear how far they finished it.
- (15) Seti I and Ramesses II convert the finished or unfinished colonnade of Amenophis III into the Great Hypostyle Hall.

As to the final destination of the two obelisks which had been removed to the west bank, they may now lie, in fragments, below the fields behind the Colossi, and future excavation may reveal them. Another possibility is that Ramesses II may have removed them back to the east bank and placed them in front of the Pylon which he added to the Luxor temple, having re-cut the faces and omitted to mention whose they originally were. Since Ramesses II's son, Merneptah, used the blocks from the Colossi Temple to build his own mortuary temple it is not unlikely that the temple of Amenophis III had already fallen into ruins during the later years of Ramesses II's long reign. The differences in height (7 feet) between the pair that once stood at Luxor may be due to the vicissitudes of handling the obelisks. Beknekhonsu, who was responsible for the work of Ramesses II at Luxor, says on his statue that he erected the obelisks for Ramesses II, but he does not mention anything about their quarrying or transport. All this, however, is pure supposition.

R. ENGELBACH.

[*Later note*].—The temple at Soleb was built by Amenophis III with a colonnade, and I believe the flanking walls are bonded into the pylon. This is another reason for considering that colonnades, and not hypostyle halls, were intended at Luxor and Karnak. It has been deduced that a hypostyle hall was intended at Luxor from the fact that half-drums of columns were found in the walls of Tut'ankhamûn. The fact that these are more or less shaped has been taken as proof that they had once been erected. To me this does not seem likely, as there are not sufficient of them to have constructed more than a column or so.

As to the flanking walls at Luxor it seems possible that the solid portion is the work of Amenophis, and the hollow part above that of Tut'ankhamûn. It must have been left (if this is so) at a height of about three metres. I suggest that the drums Tut'ankhamûn built into the walls were surplus sent from the quarries to allow for breakages.

¹ If the cartouche of Ramesses I really ever existed on one of the columns other than the central double line, it follows that it was he who changed the scheme of a colonnade into a hypostyle hall, and not Seti I.

WHO WERE THE AMORITES ?

It has been taken for granted that the Amurri of the Assyrian inscriptions, the Amorites of the Old Testament, represented the Western Semites, and that the Kingdom of the Amorites occupied the territory between the Euphrates and the Jordan. The assumption, however, is incorrect. The facts as we now know them, whether geographical, historical, philological or ethnological, point in a different direction.

Geographical.—In the survey of the high-roads of the empire made for Sargon of Akkad (*Keilschrifttexte aus Assur verschiedenen Inhalts*, 1920, No. 92, 29 ; *ANCIENT EGYPT*, 1924, Part I) we read : “ From the Gate of Talbis to the Plain is the land of GIR¹-[GIR-KI] whose frontiers are Bit-Sin and Sumer.” Bit-Sin, “ the Temple of the Moon-god,” is Harran, as in the line following, and GIR-GIR-KI is stated to be a synonym of “ the Amorite land ” (*W.A.I.*, II, 50, 59.) “ The Plain ” is the Padan-Aram of the Old Testament. In the copy of the text found at Assur the first syllable of the name of Talbis seems to have been written *sur* (-𐎶) instead of *tal* (-𐎵𐎶), but the copy was a school exercise and is full of errors. Talbis is the modern Talbes, an island of the Euphrates a few miles south of Anah. In the time of Sargon, consequently, the Amorites would have occupied the country later known as Mitanni.

In Sumerian the name is Mur-rû and not Amurru. Simti-silkhak the father of Rim-Sin is entitled *adda Murrû* “ father of the Amorite-land ” in some of his son’s inscriptions and *adda Yamutbal* “ father of Yamutbal ” in others. Yamutbal was on the eastern side of the Tigris opposite Southern Babylonia ; hence it follows that either Amorites had settled in the Elamite district of Yamutbal or that the two titles belong to different periods of Simti-silkhak’s life. Unfortunately we do not know what the title *adda* “ Father ” signifies. That Amorites should have settled on the further side of the Tigris is very probable, since they were in Babylonia in historical times, enjoying equal rights and privileges with the native Babylonians as the contract tablets show, while the Weld-Blundell tablet published by Prof. Langdon indicates that they were in Babylonia also in prehistoric times (*see below*).

The relation between the Amurru and the country called Šubartu by the Babylonians is difficult to determine. In *W.A.I.*, V. 16, 19, 20, Šabartum is associated with “ Emutbal ” on the one side and Elamtum on the other. But here neither Šubartum nor Elamtum are proper names ; they merely denote “ Highlands ” and are given as equivalents of *sadu* “ mountain.” Šubartu, in fact, denoted the “ Highland ” plateau to the north of the Babylonian plain, sloping northwards to the Khubur, the river of death, in the Armenian mountains (*see Proc. S.B.A.*, Dec., 1915). The “ land of the Khubur,” accordingly, was a synonym of Šubartu (Brünnow 2081).

Šubartu was thus a vague term denoting the uplands north of Babylonia and consequently could be expressed by the same ideographs (ŠU-GIR, ŠA-GIR) as

¹ Not GIM.

Elamtu. But whereas Elamtu was preferably restricted to the mountainous country east of the Tigris, Šubartu was preferably used of the Mesopotamian regions west of it. Hence, like Amurru, it could represent the eastern portion of Mitanni, and so be denoted by the ideographs ŠU-EDIN "the plain of Šu." ŠU is the Semitic Šutu—Beduin who still roam over the Mesopotamian plain—and corresponds with the Sheth of the Old Testament (Numb. xxiv, 17).

Just as there was a specific country of Elam, however, by the side of the general term Elamtu, so there was a specific country of Šubarū by the side of Elamtu. The litterati of Nabonidos identified this with Assyria, perhaps because the original Assyria lay under the mountains of the north-east, but more probably because the beginning of Assyrian power was due to the occupation of northern Mesopotamia; Samas-Hadad I was already king of Mari and Sirqu or Tirqa (Tel Ishâra near Dêr ez-Zôr), "the kings of Tugris" (or Turukki) in north-eastern Mesopotamia brought him tribute along with "the king of the Upper Country" (*i.e.*, northern Syria and south-eastern Asia Minor), and he engraved his records "in the land of Lebanon on the shore of the Mediterranean" (K.T.A., 1911, I, No. 2). It is possible that at this time the Assyrians gave the name of Šubria to their frontier-province on the N.W., though it is more probable that the two names, Šubria and Šubarū, have nothing to do with one another.¹

We conclude, therefore, that (1) in early days the Babylonians gave the name of Šubarū, "the Highlander," to the inhabitants of the plateau on both sides of the Tigris, irrespective of their race or language, and (2) that a portion of this territory came to be known as the land of the Murrū or "Amorite" after the Mitannian occupation of the country. That the language (or one of the languages) of Šubartu was Mitannian we learn from the glosses in the lexical tablets where the Mitannian *Tessub*, Sauskas (=Istar) and *ene* ("god") are stated to be Šu (*i.e.*, Šubartu) words.

Historical.—The earliest king of the Amorites of whom we know bears a Mitannian name. This is Aqwaruwas, as it is written in the Hittite version of the Chronicles of Naram-Sin (*Keilschrifttexte aus Boghazköi*, III, 2, 13, 12.) When we come down to the Tel el-Amarna age the names are still Mitannian, though mixed with Semitic ones. The name formerly read Abbi-Tessub has now been corrected to Dubbi-Tessub, and his father was Ar-Tessub "the gift of Tessub."² In the old Testament "Sihon, king of the Amorites," similarly bears a non-Semitic name.

¹ In the Annals of Khammurabi published by Langdon (*Oxford Edition of Cuneiform Texts*, II, pp. 31-35) Šubartu is described as being on the banks of the Tigris ("Malgi and the bank of the Tigris as far as the land of ŠU-EDIN." Later on, in the 33rd year, Malgi is conjoined with Mari near Dêr ez-Zôr on the western bank of the Euphrates). In the 36th year of Khammurabi, the Babylonian king is stated to have overthrown "the army of Turukkum, Kakmum (the modern Kerkūk) and the mountain of ŠU-EDIN"; five years earlier the combined forces of the enemy consisted of "the army of Elam from the frontier of Markhasi (the earlier Barakhsi), ŠU-EDIN, Gutium (Kurdistan), Esnunna (Tell Asmar on the eastern side of the Diyala) and Malgi." Šubartu is thus placed between Elam and Kurdistan and distinguished from Esnunna; it would therefore have corresponded to Assyria which lay west of Kerkūk. That Assyria was conquered by Khammurabi at some period in his reign we already knew, and also that the Assyrian territory already comprised north-eastern Mesopotamia as well as Northern Syria. As early as the age of the Third Dynasty of Ur (B.C. 2300) Kara Eyuk near Kaisariyeh in Cappadocia was an Assyrian colony.

² Another king of the Amorites who lived a little before the Tel el-Amarna age and was a contemporary of the Hittite king Khattusilis III had the Mitannian name of Bente-sina ("brother of the prince"); Weidner: *Politische Dokumente aus Kleinasien*, II, p. 126.

Philological.—The Sumerian name of “the Amorite” was Mur-rû. This is evidently the same as the Mitannian *Murru-khe umini* “the land of Murrû” as Dusratta in his letter to the Pharaoh (Col. III, 6.) calls his kingdom of Mitanni in contradistinction to *Masrianni umini* or Egypt. I have long ago identified the name with the Murri-kh-nas of the Syrian geographical list of Thothmes III, in which Lenormant saw the Urrakhinas of Tiglath-pileser I.¹ The suffix *khe* is common in Mitannian (and Hittite) geographical names; e.g., Urkis by the side of Urkis-khe, Salas-khas by the side of Salas, etc. According to Hrozný’s reading, the name of the Amorite also appears in a Hittite text as Mur-ri (*Hethitische Keilschrifttexte aus Boghasköi* I, p. 136). It is also the form of the name used to denote the Mitanni in the Hittite texts, where Winckler, misled by his attempt to discover the name of the Aryans, erroneously read Khar-ri Khar-las instead of Mur-ri, Mur-las (Cp. Marlos, the native name of Mallos, which was in Mitannian territory).

It is only in the Semitic languages that “Amurru” takes the place of the original Murru. The prothetic *a* will have arisen from a pronunciation Mwërru which involved a double initial consonant. In the Old Testament we seem to have the older form of the name as well as the later, “oak of Moreh” (Gen. xii, 6) and “oaks of Moreh” (Deut. xi, 30) by the side of Hammoreh (Judg. vii, 1) and the Babylonian Amorî (cp. *amîr* (“mountain)-top”).

The German excavations at Assur appear to show that underneath the Sumerian stratum lies a Mitannian stratum (H). Above the Sumerian stratum comes a stratum (F) belonging to the period of the foundation of the great temple, and of the Kings Auspia (Auswa) and Kikia, whose names, however, are more probably Gutian than Mitannian.

Ethnological.—The Mitannian language was Asianic and indicates, therefore, that those who spoke it came from Asia Minor. The name Mitanna or Mitanni by which they were known to their Assyrian neighbours tells the same tale since it signifies “the land of Mita” or Midas. We are thus at last able to explain how it is that the Amorites were found by Sir Flinders Petrie to be depicted on the Egyptian monuments as a blond race, tall and long-skulled, with blue eyes and black or red-brown hair. In my *Races of the Old Testament*, pp. 112-16, I have suggested that they were racially connected with the Libyans, the Berbers of to-day. At any rate they belonged to the white race of Asia Minor and Europe.

Mitanni—the land conquered by Midas—originally denoted only the north-western portion of Mesopotamia. But the Murri, as we now learn from the tablets of Boghaz Keui, extended westward to the frontiers of the Hittite Kingdom, and Aleppo was one of their chief cities. Southward they had made their way to the borders of Egypt: in the time of Abraham they had a settlement at Hazezon-tamar near the Dead Sea (Gen. xiv, 7), and Jerusalem claimed to be their foundation (Ezek. xvi, 3).² Here as elsewhere in Palestine and Syria they were the precursors of the Hittites and may possibly represent the dolichocephalic population of the neolithic age of Palestine. In any case they formed the dominant part of the population there in the days when Syria and Palestine first became known to the Babylonians and accordingly received the name of “the land of

¹ *Records of the Past*, New Ser., v, p. 32.

² The name of (Ebed-) Khebe, the king of Jerusalem in the Tel el-Amarna age, is Mitannian, not Hittite, since Khebe was a Mitannian goddess. His enemies were the Hittite Khabiri who, as we learn from the Boghaz Keui tablets, formed the body-guard of the Hittite king. The Mitannian word for “servant” which forms the first element in the name of (Ebed-) Khebe is unknown.

the Murrû." In the later Assyrian age the name changed to that of "the land of the Hittites." Like the Hittites in later days also they made their way into Babylonia itself in the semi-mythical age of that country. The legend of the foundation of Erech published by Prof. Langdon¹ tells us how Enmer-Kar, the Euêkhoros of Ælian, and the founder of Erech, was rescued from his Amorite enemies by Lugal-marda, king of Dêr (now Tell Asmar, east of the Diyala), and how "Sumer and Akkad (Kengi-Uri) in a body expelled the wicked Murrû."² It was thus that the Sumerians crossed the Tigris and entered the Babylonian plain where they introduced the worship of Innini or Istar into Erech. The pre-Sumerian population of Babylonia in the neolithic age, which, it must be remembered, was dolichocephalic, would have come from the highlands of Armenia and Asia Minor. If so, the Biblical traditions which brought them from Ararat would be supported, while light would be thrown on the puzzling fact that in the Sumerian hymns the Sumerians distinguish themselves from the earlier inhabitants of the country as "the black-headed" or black-haired race.

A. H. SAYCE.

Additional note.—In an inscription of Samsu-iluna, son of Khammurabi, which has just been published by Langdon (*Amer. Jrl. of Semitic Languages*, 1924, p. 227), the king calls himself *lugal dagan murrû*, "king of the land of the Amorites." *Dagan* is the Hittite word for "land," another indication that the Murrû spoke an Asianic language.

In a recently published Hittite text (KUB. vi., 38, 36), Seris is said to be the divine "Bull" of Tessub (the supreme god), and to be identical with "the god Mur-ri." Lapislazuli was brought from "the Mountain of the Bull-god," which was called Dapara, the Egyptian Tefreret.

¹ *Oxford Editions of Cuneiform Texts*, I, 1.

² Langdon translates: "In Sumer and Accad altogether the wicked Amorite shall it (= Erech) expel."

THE HISTORICAL VALUE OF EGYPTIAN NAMES.

THE continually changing fashions of names are familiar to everyone. We all recognise that each generation in recent times has had its favourite types, and each century in the past has been marked by its peculiar names ; such are the Norman Petronilla and Devorgilla, or the Edwardian Alionor and Helveth and Piers, or the familiar names which mark out Tudor or Stuart or Hanoverian times. In tracing out the history of the princes of Qau it is needful to distinguish the period of the names associated with them.

Unfortunately Egyptian names have not yet been studied, and beyond Miss Murray's Index of the Old Kingdom there is no classification by different periods. In order to compare the types of names, two indexes are here published and the available material altogether is as follows :—

	Persons.	Names.	Repetition.
Old Kingdom (Murray) ..	1929	550	3·5
Uahka contemporaries (here)	261	174	1·46
XIIth dynasty (here) ..	966	616	1·56

In counting these names small variations in spelling have been ignored, as such are found in mentioning a single person ; but if a difference may mark a period or fashion it should be counted as a distinct name.

The sources of these names are :—for the Old Kingdom, Miss Murray's Index. For the Uahka steles, 22 in Cairo Museum (20022, 20043-107-158-180-193-200-211-215-223-236-245-247-276-388-431-444-445-549-580-595-602, and one dated to the IXth dynasty, 20457, also 5 steles in Lieblein's *Dictionnaire des Noms* (529-541-1556-1650-1785) : it should be said that the current attribution of these steles to the XIIth or later dynasties is without any evidence. The names of the XIIth dynasty here are collected from steles and tombs all bearing kings' names, at Beni Hasan (B, and tomb number), in the Cairo Catalogue (M. number, less 20,000), Lieblein's *Dictionnaire* (L), Petrie's *Season* (P), Bersheh (R, tomb number, and plate), Gardiner's *Sinai* (S.) Couyat and Montet *Hammamat* (H), Berlin Inscriptions (Berl.), and Lepsius *Denkmäler* (L.D.).

An obvious change is the increase of variety in the names, which are thrice as numerous in proportion in the later periods. This is due to the increased variations on type names, rather than an increase of types.

In order to glean some distinctive tests we may note the names which are peculiar to each of these three periods ; as a name should be fairly frequent to be

431		22, 43, 107, 158, 180, 193, 200, 211, 215, 223, 236, 245, 247, 276, 388, 431, 444, 445, 549, 580, 595, 602, L 529, 541, 1553, 1650, 1785	580 OK, XII	22	
L 249	OK		215	22, 431, 444	XII
388	OK, XII		457, L 157	457	
107		43	22, 180, 193, 245	193, 457	OK, XII
595	XII	549	245	223, 444	XII
276	OK	549	457	22	
602		549	457	193, 200, 223, 388, L 1556	OK, XII
L 1785		247	457	L 1556	XII
431	OK	431	549	444	
431		200	457	22, 215, 223, 236, L 529	XII
22, 211, 580		431	431	245	OK, XII
22, 276		431, 457	457	L 1650	OK
247		107	43, 158	247	
193	OK, XII	431	549	L 1556	XII
22	OK	245, 444, 602, 223, 388, OK, XII	549	215	OK
431	XII	43	215	211	XII
L 1556, 457		580	595	158	XII
245, 549	OK, XII	457	444	215	XII
457		444	276	457	
223	XII	276	215, 223	22, 602, 602	
431		444	388	602	XII
L 1556 OK, XII		388	602 OK, XII	457	
22		22	445, 580	388	
595		457 OK, XII	549	22, 245	XII
247	XII	247 OK, XII	549 OK, XII	595, 602	XII
602		431	22, 580	223, 245, 431	ALTAR, QAU
223	XII	245	107	602	XII
L 1785	XII	215	549	43	
107		22	L 1650	431	
247	OK	200, 245, 580	388	431	XII
L 1650		1531	158, L 157	43	
193		247	215, 580	445	OK
245	XII	549	43, 276, 431, 529, 580, 602, XII	L 1785	
L 529		245	158, 457	247	OK, XII
245		247, 388	602	444	XII
158, 580	OK, XII	444	457	457	
215		457	193, 211	158, 193, 457	XII
276	XII	211	245	236	OK, XII
444, 595	OK, XII	580	457	602	OK
276	OK, XII	200	580	457	
158		247, 388	457	107	
388		457	22, 158, 200, 388, 457	223	
549		158	549	247	OK, XII
		223	457	223	
		L 529 OK, XII		107	

NAMES ASSOCIATED WITH UAHKA.

L = LIEBLEIN, DICTIONNAIRE, OTHER NUMBERS + 20,000 = CAIRO.

counted as distinctive, we may limit the test names to those that occur about 1 per cent. of the total persons of each period. There are 10 such in the Old Kingdom, 4 in the Uahka steles, and 6 in the XIIth dynasty.

Old Kingdom.	Uahka steles.	XIIth.
Ahy	Uahka	Ameny
Atta	Mut-hetep	Amenemhat
Adu	Hemăget	Mentuhetep
Ptah-shepses	Hetepui	Khenta-khety
Ra-hem		Tehuti
Khua		Să, Săt
Khenmu		
Sabu		
Snezem		
Seshem-nefer		

These do not take into account the many cases in which final  in Old Kingdom becomes  later. This is seen in Aba—Abu IX, Apa—Apu IX, Afa—Afu XII, Beba—Bebu IX—Beba XII, Heba—Hebu IX, Hena—Henu IX, Hesa—Hesu IX, Hetepa—Hetepu IX—Hetepa XII, Senba—Senbu IX, Teta—Tetu IX, Thetha—Thethu IX—Thetha XII.

Turning now to the continuity of names, there are 15 *per cent.* of the Old Kingdom names which last through to the XIIth dynasty. The Uahka group has 7 *per cent.* which are only found earlier in the Old Kingdom, and 13 *per cent.* which are only found later in the XIIth. The links with the XIIth are then about double of those with the Old Kingdom. Yet the Uahka group is distinct from the XIIth, as shewn by the lack of the very typical names of the XIIth stated above.

Another comparison of types, which means much in the outlook of the time, is the frequency of Nefer and Nekht in names, the interest in beauty or in force.

In	Nefer	per cent.	Nekht	per cent.
1929 Old Kingdom	161	8.4	7	.4
261 Uahka	12	4.7	14	5.3
956 XIIth dynasty	34	3.6	29	3.0

Thus force was much less thought of in the Old Kingdom, and beauty much more regarded, than in later times.

In the above statements one stele has been omitted, as it is on the border line, the great Louvre stele listed in Lieblein, 249. In this occurs once the name Amenemhat, so it is just within the XIIth dynasty, though all the other names are earlier. The name Uahka is on this stele, in a generation earlier than Amenemhat, and so just within the XIth dynasty. This stele is then not classed here into either the Uahka or XIIth lists, as it lies at the junction, and would confuse the character of either list by its mixture of generations. There is one other ambiguous stele, Lieblein 151, which appears to be of Hetep, chief of the prophets of Uahka under Amenemhat III; it may, however, be a unique example of Uahka as a living name in the XIIth dynasty.

The resemblances of the Uahka names to those before and after may be stated by the number of personal occurrences of certain names in each period.

			Old Kingdom.	Uahka.	XIIth.
Total	..	..	1920	261	956
Aba, Abu	..	..	9	—	6
Amen	.....	..	1	—	1
Uahka	..	..	0	37	1(?)
Beb	.....	..	21	—	6
Mentu	.....	..	0	—	0
Min	.....	..	12	1	—
Mut	.....	..	0	5	—
Nekht	.....	..	4	14	—
Ren	.....	..	6	9	—
Hap	.....	..	5	—	1
Hor	.....	..	3	2	—
Khety	.....	..	5	6	—
Sent	..	..	0	—	0
Sebek	..	..	13	21	—
Sa . . .	Sat	..	5	—	3
Thetha, Thethu	..	..	11	—	2

The dash shows where the connection of numbers is closest, having regard to the proportion in the total of persons. There are thus eight resemblances of the Uahka list to the frequency in the Old Kingdom, and seven to the frequency in the XIIth dynasty. This shows how the Uahka group is intermediate in character, though it has more continuity with the later than with the earlier period.

In the preceding list of names associated with Uahka the plain reference numbers—with 20,000 added—are those of the Cairo Catalogue (Lange and Schäfer), those with L. are from Lieblein's *Dictionnaire*. Those names that descend from the Old Kingdom are marked O.K., and those which last to the XIIth dynasty are marked XII; this is allowing for the mutation of final *a* and *u* as already mentioned.

Only a few of the steles are included with the photographs of the Cairo Catalogue. I have to thank the Director, M. Lacau, for kindly having others photographed for me, so that the style can be compared. The main distinction from later steles is the frequency in the Uahka series of cornice and roll framing round the stele, like the style of the Old Kingdom.

Some of the Uahka *ha* princes are named; one is the son of Neferhetep (L. 529), one has a wife Hetept (L. 541), one has father Uahka-em-usekht (20549), one is named as being of the Xth nome, Aphroditopolis, (*P.S.B.A.*, 1914, 38), and another of this age is named Henenta, with wife Sat-antef, and father and son named Abu (20022). None of the Uahka steles can yet be connected together by genealogy, though it is obvious that they are of one family by the frequent repetitions of names.

The list of names of the XIIth dynasty is entirely drawn from monuments with kings' names. Modern statements of the dates of steles do not distinguish between the XIIth and adjacent dynasties. Those names which begin in the Old Kingdom are marked "O.K.—". A few names are added of the XIth dynasty from Hammamat marked "XIth." The names from Sinai are largely those of workmen, and therefore from a stratum hardly represented in the usual steles. Among them are many of the popular form Ameny, but none of the form Amen-emhat. Even in this lower class there are none left of the old simple names, Beba,

𐎢𐎠𐎣 M. 127	𐎢𐎠𐎣 L. 99, 103, 108, 109, 114 130, 133, 143, 147, 149, 152, 3. 5-24, 28, 85, 92, 96, 97, 98, 117. L. 136 5.	𐎢𐎠𐎣 B. 2	𐎢𐎠𐎣 L. 1506 OK—
𐎢𐎠𐎣 R. 2. XX		𐎢𐎠𐎣 L. 123	𐎢𐎠𐎣 L. 1493
𐎢𐎠𐎣 P. 262 OK—	𐎢𐎠𐎣 L. 1506	𐎢𐎠𐎣 L. 1489	𐎢𐎠𐎣 L. 108, 112, 3-4, 115 130, 146, 148, 149
𐎢𐎠𐎣 L. 130 OK—	𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 L. 152, B. 2, M. 515	B. 3, 5-24, 81, 85, 93, 114, 115 M. 515, L. 136 f, XI TH H. 42, 48
𐎢𐎠𐎣 S. 90 OK—	𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 L. 1481	(𐎢𐎠𐎣) R. 2 L. 1467
𐎢𐎠𐎣 L. 1489	𐎢𐎠𐎣	𐎢𐎠𐎣 S. 54	𐎢𐎠𐎣 S. 24, 29, 143
𐎢𐎠𐎣 L. 1480 OK—	𐎢𐎠𐎣 S. 115	𐎢𐎠𐎣 L. 99, 123, 130, 139. L. 139 6	𐎢𐎠𐎣 L. 140-1
𐎢𐎠𐎣 L. 152	𐎢𐎠𐎣 L. 134, 5-24, 83, 85	𐎢𐎠𐎣 L. 146	𐎢𐎠𐎣 L. 104, M. 26
𐎢𐎠𐎣 S. 105 OK—	𐎢𐎠𐎣 L. 1485	𐎢𐎠𐎣 L. 99, 152. OK—	𐎢𐎠𐎣 S. 90
𐎢𐎠𐎣 P. 154	𐎢𐎠𐎣 S. 154	𐎢𐎠𐎣 L. 135, 152, 5-24, 85	𐎢𐎠𐎣 L. 148
𐎢𐎠𐎣 L. 144	𐎢𐎠𐎣 L. 104, 105-3, 127, 131, 149, 148, 0, B. 2, B. 119, P. 154. XI TH H. 43. 110.	𐎢𐎠𐎣 L. 104	𐎢𐎠𐎣 L. 1506
𐎢𐎠𐎣 L. 131	𐎢𐎠𐎣 L. 1506	𐎢𐎠𐎣 S. 28	𐎢𐎠𐎣 B. 3 OK—
𐎢𐎠𐎣 L. 1489	𐎢𐎠𐎣 L. 114	𐎢𐎠𐎣 L. 107	𐎢𐎠𐎣 P. 154
𐎢𐎠𐎣 R. 2. XVII OK—	𐎢𐎠𐎣 L. 113	𐎢𐎠𐎣 L. 108, B. 3	𐎢𐎠𐎣 L. 119
𐎢𐎠𐎣 S. 28	𐎢𐎠𐎣 L. 1506	𐎢𐎠𐎣 XI TH H. 43	𐎢𐎠𐎣 L. 1485
𐎢𐎠𐎣 L. 133	𐎢𐎠𐎣 L. 106, 117, 140, 141 1485, 1506, 141	𐎢𐎠𐎣 L. 144	𐎢𐎠𐎣 L. 141
𐎢𐎠𐎣 L. 147	𐎢𐎠𐎣 L. 1506. P. 157	𐎢𐎠𐎣 B. 3	𐎢𐎠𐎣 L. 111
𐎢𐎠𐎣 B. 3	𐎢𐎠𐎣 L. 122, 5-86	𐎢𐎠𐎣 L. 1485, 1506.	𐎢𐎠𐎣 L. 131
𐎢𐎠𐎣 S. 85, 95, 105, 115	𐎢𐎠𐎣 B. 2. S. 24	𐎢𐎠𐎣 L. 122, 128, R. 2 xi	𐎢𐎠𐎣 B. 2, 3, 14, 15, 29, 33
𐎢𐎠𐎣 S. 100	𐎢𐎠𐎣 S. 100	𐎢𐎠𐎣 XI TH H. 105	𐎢𐎠𐎣 L. 130
𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 L. 120	𐎢𐎠𐎣 S. 71, 72	𐎢𐎠𐎣 B. 3, S. 85, M. 140, OK—
𐎢𐎠𐎣 M. 315	𐎢𐎠𐎣 L. 107	𐎢𐎠𐎣 L. 123 OK—	𐎢𐎠𐎣 M. 127
𐎢𐎠𐎣 L. 130	𐎢𐎠𐎣 B. 1, 2, M. 539	𐎢𐎠𐎣 S. 24, 81, 85, 105 OK—	𐎢𐎠𐎣 S. 88
𐎢𐎠𐎣 L. 104	𐎢𐎠𐎣 S. 105	𐎢𐎠𐎣 L. 128 OK—	𐎢𐎠𐎣 L. 136 d
𐎢𐎠𐎣 S. 24	𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 L. 146	𐎢𐎠𐎣 L. 144 OK—
𐎢𐎠𐎣 H. 96	𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 R. 2. XI	𐎢𐎠𐎣 S. 105
𐎢𐎠𐎣 S. 56	𐎢𐎠𐎣 L. 1494	𐎢𐎠𐎣 S. 114, 115	𐎢𐎠𐎣 S. 54
𐎢𐎠𐎣 S. 106	𐎢𐎠𐎣 L. 130	𐎢𐎠𐎣 L. 128	𐎢𐎠𐎣 S. 85 OK—
𐎢𐎠𐎣 S. 106	𐎢𐎠𐎣 L. 152	𐎢𐎠𐎣 L. 1531	𐎢𐎠𐎣 L. 1493 OK—
𐎢𐎠𐎣 L. 1494	𐎢𐎠𐎣 B. 2.	𐎢𐎠𐎣 L. 1506	𐎢𐎠𐎣 L. 1493 OK—
𐎢𐎠𐎣 H. 43	𐎢𐎠𐎣 S. 93	𐎢𐎠𐎣 L. 152	𐎢𐎠𐎣 S. 100
𐎢𐎠𐎣 M. 140	𐎢𐎠𐎣 L. 147	𐎢𐎠𐎣 P. 154	𐎢𐎠𐎣 S. 117
𐎢𐎠𐎣 L. 141	𐎢𐎠𐎣 L. 140, 141	𐎢𐎠𐎣 S. 93	𐎢𐎠𐎣 L. 132
𐎢𐎠𐎣 S. 90	𐎢𐎠𐎣 L. 108	𐎢𐎠𐎣 L. 147, 5, 100	𐎢𐎠𐎣 L. 114
𐎢𐎠𐎣 B. 2	𐎢𐎠𐎣 L. 107, P. 154	𐎢𐎠𐎣 L. 126	𐎢𐎠𐎣 B. 3
𐎢𐎠𐎣 L. 114, 1482-3, 1487, B. 2 R. 2. XXIX M. 127, 140, 516. XI TH H. 40 OK—	𐎢𐎠𐎣 L. 1484	𐎢𐎠𐎣 B. 3	𐎢𐎠𐎣 S. 34, L. 144
𐎢𐎠𐎣 L. 100	𐎢𐎠𐎣 L. 99, 104, 106-7, 113 117, 122, 131, 146, 147, 148, 1484 1492, 1506, B. 3, 5-85 Berl. 1190, XI TH H. 199 OK—	𐎢𐎠𐎣 B. 23	𐎢𐎠𐎣 L. 149
𐎢𐎠𐎣 L. 119, 144	𐎢𐎠𐎣 L. 108	𐎢𐎠𐎣 R. 2. XXIV, 5 XIII	𐎢𐎠𐎣 L. 111
𐎢𐎠𐎣 S. 117	𐎢𐎠𐎣 L. 99	𐎢𐎠𐎣 S. 117	𐎢𐎠𐎣 L. 1506
𐎢𐎠𐎣 B. 2	𐎢𐎠𐎣 P. 98	𐎢𐎠𐎣 L. 1489	𐎢𐎠𐎣 L. 1494
𐎢𐎠𐎣 L. 123	𐎢𐎠𐎣 S. 85	𐎢𐎠𐎣 M. 515	𐎢𐎠𐎣 L. 123, B. 3, 5-77
𐎢𐎠𐎣 L. 146	𐎢𐎠𐎣 L. 1485 OK—	𐎢𐎠𐎣 L. 119	𐎢𐎠𐎣 S. 83
𐎢𐎠𐎣 L. 1506 OK—	𐎢𐎠𐎣 L. 144	𐎢𐎠𐎣 S. 90	𐎢𐎠𐎣 L. 1506 OK—
𐎢𐎠𐎣 B. 2	𐎢𐎠𐎣 L. 152, XI TH H. 87 OK—	𐎢𐎠𐎣 R. 2. XXVII	𐎢𐎠𐎣 S. 35
𐎢𐎠𐎣 H. 17	𐎢𐎠𐎣 L. 113	𐎢𐎠𐎣 L. 110	𐎢𐎠𐎣 S. 28
𐎢𐎠𐎣 L. 117, 123, 137, H. 96	𐎢𐎠𐎣 S. 105	𐎢𐎠𐎣 M. 515	𐎢𐎠𐎣 L. 114, 115 OK—
𐎢𐎠𐎣 L. 144	𐎢𐎠𐎣 L. 1506	𐎢𐎠𐎣 L. 149	𐎢𐎠𐎣 L. 100
𐎢𐎠𐎣 L. 108	𐎢𐎠𐎣 L. 135 OK—	𐎢𐎠𐎣 L. 144	𐎢𐎠𐎣 L. 107
𐎢𐎠𐎣 M. 516	𐎢𐎠𐎣 L. 135 OK—	𐎢𐎠𐎣 S. 95	𐎢𐎠𐎣 S. 47
𐎢𐎠𐎣 L. 108, M. 515	𐎢𐎠𐎣 L. 135 OK—	𐎢𐎠𐎣 S. 106	𐎢𐎠𐎣 L. 101
𐎢𐎠𐎣 B. 2. XV.			𐎢𐎠𐎣 L. 127, 1485-6 L. 131

NAMES ASSOCIATED WITH KINGS OF XIITH DYNASTY.

B, BENI HASAN. L, HAMMAT. L, LIEBLEIN. L.D., DENKMÄLER. M, CAIRO.
P, SEASON IN EGYPT. R, BERSHEH. S, SINAI.

	P.154		L152, 1506 OK—		L.124		M.515
	L100, 116, H55		L.112, 140		L.146		B.2, M.515
	L.125-6, 131, 137, 152, 1491		S.106 OK—		L.1506		M.515
	S.48, 121, P.91, M.516		M.515		L.1506, B.1, L.1190		L.113
	L.112, 138, M.598		B.3 OK—		L.1506		L.99, 119, 149, 157 B.2, 3 OK—
	L.139 2, F.		L.144, M.536, H.48		S.115		L.99, B.2, 3 H.48
	L.131		S.23		L.1480		L.124, 1489, 1491
	L.131		L.108 OK—		B.2		S.85 B.1, 1133 OK—
	B.3		P.154		B.2.		H.17
	H.96		B.2		M.140		L.1485
	L.111 OK—		L.1487		L.1483		L.1506
	L.103		L.121, B.3, R.1 VII		L.1492		S.85
	L.99, B.3, S.106, 114-5		R.2, X, XVII R.3 XV		L.119		B.3, 15
	H.19 OK—		R.2 XXVII		S.24		S.85
	L.116, 131		L.111, 135, 157, 1481, 1483		B.3		L.111, 123
	S.85		B.2, 3, 14. S.85		L.1479		P.1524
	L.101		M.515-6		M.516 OK—		S.107
	S.27, 81, 131, P.91		L.100 B.2, 3, 21, S.85		L.1479		M.516
	L.108, 144		R.2 XXIX OK—		M.515		L.146
	B.3		R.2 XV		B.3 OK—		B.15
	L.147		L.149		L.1491 OK—		R.2, XVII OK—
	L.107		M.515		L.120, H.47		L.114, S.85, M.515
	L.117		R.2, XXIX		L.120 OK—		L.106, 115, 128
	S.85		L.103		L.1482, H.48		134, 140, 143, S.57, 83 OK—
	S.85		L.1480		L.107, 108, 123, 125		L.122
	S.85		L.105		L.113		M.516
	S.85		L.1491		L.105, 1480		R.2, XXX
	S.85		B.2		B.2 OK—		L.99
	S.85		B.3, 13.		M.516		L.112
	S.85		B.2, 23		L.103, 109, R.2 XXIV		B.2 OK—
	R.2 XIII		L.148		B.2		B.1, 1192
	L.125		S.114		L.1481		H.47
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	L.1506		S.85		L.1481		B.23
	B.2.		L.1487, 1489		L.144, M.536		L.144 OK—
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	L.113		L.1479		L.144		L.1480
	L.1506		L.128 OK—		L.1491		L.100
	L.1490		L.114, 1490, 1493		L.114, B.2		L.134, S.83, 105
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	S.85		S.81		S.88		S.85
	L.106		L.111		L.101		L.133
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	L.108		L.131		L.114, 1494, S.119		S.85, 90
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NAMES ASSOCIATED WITH KINGS OF XIIth DYNASTY.

B, BENI HASAN.

H, HAMMAT. L, LIEBLEIN. L.D., DENKMÄLER.

M, CAIRO.

P, SEASON IN EGYPT. R, BERSHEH. S, SINAI.

F

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NAMES ASSOCIATED WITH KINGS OF XIIth DYNASTY.

B, BENI HASAN. H, HAMMAMAT. L, LIEBLEIN. L.D., DENKMÄLER. M, CAIRO.
P, SEASON IN EGYPT. R, BERSHEH. S, SINAI.

Teta, Dada and Thent. The Mehti names in this age are only found in Sinai, probably due to eastern recruits.

What is now needed is the classifying of the undated steles by the names, separating those before the XIIth dynasty from those of the XIIth and of the XIIIth—XIVth dynasties. When the Old Kingdom is divided into early and late names, the IXth to XIVth separated, and the division of the early and late XVIIIth, the XIXth—XXth, and the various later periods all distinguished on the basis of dated monuments, a great instrument will be in our hands for discriminating different periods.

It should be mentioned that Lieblein's Dictionary of names, so often quoted and so useful, is deficient in the Index. After extracting 332 names from the copies, they were checked by the index, and 18 names, as well as 14 references to included names, were found to be missing.

FLINDERS PETRIE.

NOTE SUR LES BATEAUX PRÉHISTORIQUES.

DÉCRIVANT les peintures de bateaux sur les vases préhistoriques de la catégorie appelée par Petrie "decorated," j'ai écrit dans la nouvelle édition de mes "Leçons," qui paraîtra prochainement sous le titre : "*L'Art Égyptien. Étude et Histoire*," t. I., p. 47 : "A la proue des deux, une sorte de palme qui sert peut-être de voile." On trouvera réunies dans Petrie, *Prehistoric Egypt*, Londres, 1920, pl. XIX-XXII des variantes nombreuses de ces palmes fichées à l'avant des bateaux. Dans ANCIENT EGYPT, 1914, p. 34, Petrie écrit : "In the bows there is a seat for the look-out man, with a branch put over it to shade him from the glare. Whether these branches were young trees in pots, or cut branches, is not certain." La nouvelle explication que je suggère m'a été fournie par la lecture d'un livre de L. Bernardini sur *Le Littérature scandinave*, Paris, 1894, dans lequel, à la page 45, au milieu d'une description de la région du Mélar et de l'Archipel près de Stockholm, on trouve le passage suivant : "Les habitants vivent presque exclusivement de la pêche . . . Plus d'une fois, durant la journée, nous avons rencontré leurs barques teintes en rouge, qu'ils fabriquent eux-mêmes avec des sapins. Les rameurs, souvent, sont des enfants de sept à huit ans, et parmi eux, des fillettes au teint d'ambre, sur lequel tranchent curieusement la chevelure d'un blond presque argenté et les clairs myosotis des prunelles. Ils errent ainsi seuls à leur plaisir sur les vagues et, pour aller plus vite, quand par hasard le bateau n'a pas de voiles dressent contre le vent des branches vertes coupées à la rive." Et cela expliquerait parfaitement pourquoi ces branches sont parfois tressées sur les barques préhistoriques, de manière à augmenter leur efficacité. C'est le mât et le voile sous une forme tout à fait rudimentaire.

JEAN CAPART.

A similar use of the branch on the Guinea coast was pointed out by Mr. E. S. Thomas in ANCIENT EGYPT, 1923, p. 97.

REVIEWS.

Lettre à M. Dacier . . . par Champollion le Jeune ; précédée d'une étude sur le déchiffrement par Henri Sottas. 8vo. 84 + 52 pp. 4 plates. (Paris, Geuthner.) 1922. 25 frs.

This is a facsimile lithograph edition of Champollion's classic demonstration issued in 1822, which established the permanent lines of hieroglyphic transcription. The study by M. Sottas prefixed is a discussion of the stages of decipherment which led up to the decisive work. It is difficult to us, who accept the system without regarding its pitfalls, to realise how long the various decipherers were delayed by the mixture of principles in the writing. The old idea of a purely symbolic writing had to be reduced to its minor place. The distinction of mute determinatives had to be made, to eliminate them from transcription. The distinction of single letters from syllabic signs had to be grasped. Then the only period when bilingual renderings were to be had was when hieroglyphs were being forgotten by the Egyptians, were used in a corrupt and fanciful manner, and had difficulties which were unknown in good periods. It is only a wonder that so much could be reached through such poor material.

M. Sottas is very impartial in his assignment of the credit of the long and tentative work which led up to the decisive step of 1822. For a generation before, various acute minds had been working at the problem. Far the most successful was Young, and in judging of his relaxing his efforts after having gone so far, we must remember that his main interest was in physical science, and hieroglyphs were only a by-play. The fraction of his skill that he gave to that subject almost outdid the labours of those who were entirely devoted to it. M. Sottas carefully sifts out the successes of Young, and shows that he had rightly understood over a hundred signs, though his mistakes were more numerous. Moreover, he had proposed numerous Coptic equivalents, of which many were correct. He had his feet well on the ladder, and had he not been immersed in other work he would probably have cleared away the difficulties which delayed him. All of this preceded the exposition by Champollion, which was the crystallising of results that had been partly known for several years before.

What seems really needed for the history of the subject would be a table of the dated results of each worker in historical order, stating at length what was correct, and saying what proportion that bore to the whole of his statements. In any case we must welcome so clear a discussion, and so impartial a statement, as that here prefixed to the celebrated letter of 1822.

La Scultura ad Ahnâs note sull'origine dell' arte Copta. By UGO MONNERET DE VILLARD. 8vo., 97 pp., 68 pls. (Milano, office of "Aegyptus.") 1923.

This work is of value as a comparative study of the later Roman sculptures, and as a convenient *corpus* of material, comprising 105 examples of work. After a chapter on the history of Ahnâs in the Roman period, and the types of Roman

lamps there, the serious comparison of the sculptures begins. The various motives are described—Herakles, Nereids, Orpheus, Leda, Europa, Daphnae. Then the architectural divisions of capitals, niches, conchs, shell conchs, and ivy-leaf pattern. The dating of various ornaments and attire of the figures is treated, with a view to dating the sculptures. All of this is good material for discussion, although much of it is inconclusive, or so much later than examples elsewhere that it cannot point to an origin. Lastly there is an account of the evidence of foreigners entering Egypt, as giving a reasonable ground for expecting influences of foreign art. Attention is given repeatedly to the dating of the different subjects, though unfortunately nearly all such material is but vague. Full references to sources appear on every page.

Regarding now some details. The continuous scroll pattern of foliage is noted in many different sources, through Syria, to India and China, with dates of the 4th century and onward. This may interest us as to its dispersion, but the origin of it is as early as the 1st century, as it is seen on Pompeian tomb decoration and bronze work, and all the other examples are local adaptations of the motive. The spread of the Græco-Roman style in the Han period of China (two centuries B.C. and A.D.) is in the general history of art, of which this is only one detail. The heart-shaped ivy-leaf pattern is concluded to have been diffused from Alexandria at the beginning of the 4th century. It forms borders in the theatre of Oxyrhynchos, probably of a century earlier. The bulla pendant is quoted from a great variety of sources, naming the 4th and the 2nd century. The Hawara portraits show the crescent pendant to necklaces of the 2nd century, the ball beginning at about 200 A.D. Wide as the range of comparison here given, we yet need a more complete collection of dateable works, and then an exhaustive study of their details. The present work is a welcome addition to our resources for study; the illustrations are especially clear and well chosen.

Das Re Heiligtum des Königs Ne-Woser-Re (Rathures). Band II. Die Kleine Festdarstellung, v. BISSING and KEES, Leipzig, 1923. This is a portfolio of reliefs (scale 1 : 4) from the "vestry" of the Sun temple, with some explanatory notes. Fuller explanations are given in *Untersuchungen zu den Reliefs aus dem Re-Heiligtum des Rathures, I. Teil*, by v. BISSING with the collaboration of H. KEES (*Abhandlungen des Kgl. bayerischen Akademie des Wissenschaften, phil.-hist. Klasse*, Munich, 1922).

Vol. III of the series is to contain representations from the courtyard, ascent to the obelisk, etc., which are referred to in the text as *Z* followed by a number. Vol. IV is to contain the "Welt Kammer" and the small finds. v. BISSING considers that the whole building was erected in honour of the *heb sed*, and that the reliefs have nothing to do with sacrifices before the statue of a King. In addition to the foundation of the temple and the counting of cattle, the reliefs depict great homage scenes in which the King took part; visits to the chapels of the gods, who had come from all parts of the country, and the escort of the King to the throne by these gods. The King dedicated part of his property to the gods, who handed him in return weapons and the symbols of rule. The majority of the gods taking part in the festival are "followers of Horus." Amongst the local gods are Horus of Libya and Neit of Libya. Amongst the divine symbols is the so-called Khensu symbol, borne by a ; the symbol thus seems to be connected with the Isis cult. Horus and Set appear to live at peace in the temple, as a royal

visit is paid to both gods, and as two falcon standards are carried in procession. The double pavilion is characteristic of the Sun temple. The royal children, usually three in number, take part in the processions in a palanquin. The relation of the festival to Upper Egypt is strongly pronounced as the representation of an episode in Lower Egypt is either a counterpart of that in Upper Egypt or is missing entirely. This state of affairs was difficult to realise whilst only Bubastis and fragments of older records at Soleb and Thebes were known. From the New Kingdom onwards, no festival was possible without Amen. The absence of Ptah, Sekhmet, Seker, Nefertum and Atum is significant of the position of Memphis and Heliopolis at the time of origin of these pictures, and in the author's opinion these conditions do not accord with the belief in the pre-dynastic supremacy of Lower Egypt.

The King is shown walking to a building "to receive the *sed* garment of 4-weave royal linen" () and going to a building "to remove" this garment. There is nothing to distinguish this costume in appearance from the short dress he wears before and after the change. The name of the festival has been derived from *śd* "tail." SETHE now considers (*Göttingen Nachrichten*, 1921) that the determinative is not like the tail but resembles more the *idb* or *wdb* signs, which are both land signs. BISSING quotes texts in which *śd*, *śdt*, *śdyt* is a garment; against the equation with *śd*, "tail," he notes the facts that the word for "tail" has remained masculine in Coptic and that the tail is absent in the Sun temple.

L. B. ELLIS.

Assyrian Medical Texts—The Cuneiform Texts. By R. CAMPBELL THOMPSON. 4to, 107 pp. (Milford.)

Assyrian Medical Texts. By R. CAMPBELL THOMPSON. Roy. 8vo, 34 pp. 2s. 6d. (Luzac.) [Translations.]

The texts here translated are fragmentary, and Mr. Thompson's main interest has been in the identification of the various vegetables and minerals named. These number 250 and 120 respectively, leaving 180 unidentified. How far Mr. Thompson has been successful time alone will show, but this is the beginning of a long study, and his *Assyrian Herbal* and the paper communicated to the Royal Society in March last show how well he is equipped for the task. From the prescriptions translated in the *Medical Texts* Assyro-Babylonian medicine seems to have been very creditable. There are, of course, some very compound remedies, as in modern medicine a hundred years ago; but they were reasonable remedies, purely natural in three-quarters of the cases, and seldom relying on charms or magic to the extent that the numerous texts dealing with these subjects would lead us to expect. The tying of knots comes in as a favourite charm. The use of copper compounds as a germicide for the eyes is comparable with the use of malachite in Egypt. Unfortunately the fragmentary state and uncertain translation of these texts make most of the inscriptions imperfect.

Notwithstanding many possible imperfections, there is no doubt that this work is the most scientific upon the subject of Assyro-Babylonian medicine that has yet appeared, and the author is to be congratulated upon it as well as upon the excellence of his copies. In his identifications of the medicaments used

(which are mainly vegetable), he points out, in his *Assyrian Herbal*, the need for caution.

The portions of the human frame treated of are the head, the body, and the eyes. The remedies and concoctions used are very varied, and in many cases not over pleasant. The use of sulphur-ointment for scab (scurf) and lice in the head, however, is apparently among the most sensible of the remedies, though probably not always successful. Another remedy includes "dust of *diki* of caper, dust of sesame, dust of ¹millet," and "dried doves' dung from a palm of the mountains." "Dung" is expressed by the character KU, which is used for "flour" or "meal" among other things, and the reader will naturally ask how it is that the same character comes to be used, in the same inscription, for two things so different. There is hardly any doubt that a desire existed to make things as difficult as possible for the comparatively unlearned, and this would account for the two usages; but as flour is made into dough, KU could, by extension, have that meaning, and in the mind of the Babylonians, "dung," especially that of a bird, was comparable with "dough."

One of the most interesting words is *kasia*, which seems not to have been cassia, as was suggested some time ago, but "roses." It often occurs alone, but is found also in the phrase *me kasia*, "attar of roses." In an order for garden-produce, *kasia* (*ša-pisannaku-dešša-igub+šar+ia* are the names of the ideographs which compose it) appears (if the quantities be the same) as costing twice as much as sesame. As it is also mentioned in connection with dates, *kasia* (in Semitic Babylonian *kasû*) may likewise be regarded as an article of food. The *kasia* (transcribed provisionally with the name of the character, *pisan-dešša*), occurs in the text of No. 69 of the *Amherst Tablets*. The amount there mentioned is 8 *gur* 153 *qa*—rather great if such light things as roses (or rose-leaves) are referred to, for the *gur* was the weight by which the tonnage of boats was measured. Other things referred to in this fine old text are the *šam kura*, "mountain-herb," *gu-gal* and *gu-tur*, "large *gu*" and "small *gu*," which were also used in these medical prescriptions. This is not the *gu* borrowed by the Assyro-Babylonians under the form of *qu*, and meaning "thread." Four categories of the *gu*-plant are listed, in addition to what I regarded as being the seed-case (? pod).

The portion dealing with diseases of the eye (p. 22) is, if possible, more interesting than that of the head. The remedies are sometimes elaborate, and the ordinary reader might add, calculated to make a patient wince: "If a man's [eyes] are sick, and matter (?) is secreted on his temples, [thou shalt spread] tanners' verdigris ('shoemaker's vitriol' in Budge's *Syriac Book of Medicines*) on vellum" (?), "on [his eyes] bind, bray copper-dust, arsenic, yellow sulphide of arsenic, mix in curd, apply to his eyes"

Though the Assyrian transliterations are not given, "chiefly because of the difficulty of printing them," there are copious footnotes which furnish good and suggestive explanations and details. It is to be hoped, however, that transliterations will be published later on, as they would be of considerable value in cases of doubtful readings. It will be realised that in this work Mr. Campbell Thompson has accomplished an exceedingly difficult task, and we may look forward to further studies of this important section of Assyriological research from his pen.

THEOPHILUS G. PINCHES.

¹ A doubtful rendering

The Assyrian Herbal.—By R. CAMPBELL THOMPSON, folio, xxvii + 294 pp., 1924, n.p. (Luzac.)

This work is a monograph, in “rhoneo-ed” manuscript, on Assyrian vegetable drugs, based on the study of many hundreds of medical tablets, including the 660 that he published in his *Assyrian Medical Texts*. The method adopted has been to tabulate the occurrences of the drugs and thus obtain a proportionate calculation of the relative popularity, rarity, or other factor of a drug. Then the Assyrian plant-lists have been studied and in these the ancient botanists collected a number of synonyms and equivalents for different plants which they arranged in a definite order. The data derived from these sources and from the *Syrian Book of Medicine* were then co-ordinated and applied by comparison with the modern flora of Mesopotamia and with the drugs of Oriental and Classical writers as well as with those in the modern Pharmacopoeias, both European and Oriental, in their parallelism of use, and particularly by philological comparison with other Semitic languages. The result is an interesting volume which gives us all that is at present known about Assyrian vegetable drugs.

The problem of the identification of ancient plant-names is one of very great difficulty, chiefly because the data that we have to rely on is mainly philological and there is no more treacherous guide. Mr. Thompson tells us that the Assyrian botanists in their lists of plants “not infrequently added illuminating little notes of their own.” But what do these notes amount to? The opium poppy is said to be “like mandragora; children and women gather its juice.” Another plant is said to have “a green fruit”; another has “a flower like the chamomile, small and dark blue.” These notes are not even as helpful as those sometimes given by the old Egyptian writers, and such notes in Egyptian documents are unluckily rare enough. I do not find anything in the Assyrian lists comparable to this about the *Chrysanthemum coronarium* in the London-Leiden Demotic Magical Papyrus; “Fine-face” is its name, the “Gold Flower” of the wreath-seller; its leaf is strong, its stem is cold, its flower is golden.” Mr. Thompson says (p. xi) that an examination of the plant-lists shows that the Assyrian botanists adhered in the main to a definite arrangement, but beyond the fact that the lists usually begin with the grasses and rushes it is difficult to see what the “definite arrangement” is. Theophrastus classified plants under trees, shrubs, under-shrubs and herbs. The Egyptians recognised four classes, the names of which were derived from typical examples of each group; these were trees, bushes, reeds, and herbs. The Assyrians possibly had a similar arrangement, for they used separate determinatives for trees, aromatic shrubs, reeds, and plants. On pp. xvii and xviii is given a section on the Migration of Assyrian Plant-names, which shows that some of them found their way into the Western languages. Mr. Thompson’s remarks on ARMANU = Armonica = Apricot are particularly interesting. On p. 98 Mr. Thompson, speaking of the Castor-oil plant, says that “the synonym in Aḥlamê, bu’su, the nasty (-smelling) drug is most convincing,” but it must be remembered that different peoples have very different ideas as to scents. Castor-oil is a favourite one with the Bisharîn and I have known Egyptians in the Delta who preferred castor-oil for dressing salad, not for any medical reason, but because of its scent! It is remarkable that *ladanu* does not occur in Assyrian Medicine, nor have I yet recognised it in Egyptian. At the end of his book Mr. Thompson gives a list of works that he has referred to, but no mention is made of Dr. Schweinfurth’s very useful *Arabische Pflanzennamen aus Aegypten, Algerien und Jemen*, published in Berlin in 1912, or of Tschirch’s *Handbuch der Pharmakognosie*, published at Leipzig, 1910.

P. E. N.

The Composition of some Ancient Bronzes. By G. BRINTON PHILLIPS. 8vo, 15 pp., 2 pls. (American Anthropologist, Vol. 24, p. 129.) 1922.

In this paper the author supplies analyses of specimens which he collected and photographs of some pieces. It is so important to render analyses readily accessible that the results are here summarised :—

						Cu.	Sn.	Pb.	Fe.	Co.	As.
Bowl	..	Luxor	..	XI dyn.	..	85·8	3·5	8·5	·2		
Axe	..	+ ·7 Sb.	..	XII ?	..	88·9	·2	·6			5·6
Cast hollow handle.	..	..	..	..	..	73·7	4·8	19·2	·2	·8	
Nail	..	Memphis	..	XXVI	..	74·6	·9	21·3	·3		
Fragment	..	"	..	XXVI	..	92·0	6·5	·8	·3		
Bowl	..	Mykenae Schliemann	..	..	..	99·4		·2			·2
Sword handle	..	"	..	..	..	99·4	·1				
Thin sheet	..	"	..	..	..	95·6	·1		·9		
Fragment	..	Acropolis, Athens	..	520 B.C.	..	88·1	9·7	·3			
"	..	Crete, corroded	..	..	..	68·4	13·5				
Axe	..	Taormina + ·2 Zn.	..	600 B.C. ?	..	90·3	7·3	·2	·5		
Sheet	..	Populonia, Etruria	..	300 B.C. ?	..	84·3	10·3				
Mirror	..	Carthage	..	..	..	82·0	14·4		·6		
Socketted celt.	..	Pickering, Yorkshire	..	..	..	83·8	10·2	5·3	·4		
Sickle	..	Saratov, Russia	..	1600 B.C.	..	91·5			6·2	·3	
Bowl	..	Ceylon	..	XII cent. A.D.	..	77·5	19·6	·2		·4	
Mirror	..	China	..	1000 A.D. ?	..	65·2	9·7	23·2			
Mirror	..	Japan reliefs	..	1300 A.D. ?	..	73·2	10·8	14·5			
Spoon	..	Korea	..	900-1400 A.D.	..	77·2	21·5		·7		
Bell	..	Yucatan	..	..	..	97·0	·3	1·0	·1		
Knives	..	Peru	..	..	.. to {	96·8	3·0				
Chisel	..	"	..	..	..	94·3	4·8		·3		
Axe	..	"	..	..	..	96·2	3·7				
Ornamented pin, + ·3 Zn.	..	..	..	..	..	93·7	5·0				
Mirror	..	..	..	..	..	86·0	13·4				
South American tools	..	..	..	..	..	94·3	5·3				
Bolivian tools	..	..	..	..	..	..	5 to 10 Sn.				
Cuzco tools	..	..	..	..	..	..	2 to 10.				
Tiahuanaco tools	..	..	..	..	..	..	3·9 to 8·5.				
	..	..	..	..	..	..	3·3 to 7·8.				

In Peru a large mass of pure metallic tin was found, showing that the Inca smelters were familiar with it, and could produce regular and uniform alloys in proportion. Cassiterite is found associated with copper in the lodes in Bolivia.

Our gratitude is due to Mr. Phillips for collecting and analysing so many specimens, partly with Dr. Wallace of Pennsylvania University.

Études d'Étymologie Copte. By EUGÈNE DÉVAUD. 68 pp. 1922.

This *Thèse de Doctorat* is one of those highly specialised dissertations which appeal only to the philologist. The whole work depends on the meticulous accuracy of detail, and Dr. Dévaud shows in this, as in his other publications, that he is a master of such work. He has, in this book, published his researches into the etymology of twenty-eight Coptic words ; these he divides into three groups :—those derived from the Egyptian, those formed from other Coptic words, and those of foreign origin.

In the first group, M. Dévaud gives examples of the use of each word in Coptic and in Egyptian, and then remarks on the exact meaning in both. The second group

is the most interesting, as showing the derivation of a noun from a verb, *e.g.*, ⲧⲉⲁⲩⲁⲓⲁⲓⲉ "Death-rattle," from ⲩⲉⲟⲗⲁ "To be hoarse." The third group touches on a subject which has already been much worked by other scholars, the derivations from the Hebrew.

In dealing with each word, Dr. Dévaud gives examples of the use first, in Coptic, then, according to the group, in Egyptian, Coptic, or a Semitic language; and concludes with remarks on the meaning, the form, and other details. The references are given in marginal notes.

This is emphatically not a book for the general reader, but equally emphatically it is a book for a scholar by a scholar.

M. A. MURRAY.

Tutankh-aten, a story of the past. By L. ECKENSTEIN. Dm. 8vo. 159 pp. 4s. 6d. (Cape.)

This is a reconstruction of the Egyptian material of the Akhenaten period, which will aid many to realise the actual manner of life, and with no notable misconceptions, such as too often mar such attempts. Wide uncertainty, however, lies on one feature which runs through half the book, the placing of Moses in the scenes. This depends on the value which could be assigned to the traditions in Josephus, Philo, and Eusebius; and in the second place on connecting the princess Termuthus there named, with Mertaten the daughter of Akhenaten. This would involve the exodus having been in the reign of Ramesses II. No reason is given for joining in the Jewish traditions at this point of history.

Luxor and its Temples. By A. M. BLACKMAN. Illustrated by BENTON FLETCHER. 8vo., 200 pp., 24 plates. 7s. 6d. (Black.)

This is a series of well informed chapters on the houses and temples, and incidentally on the history. There is much that will not be found in any of the speculative books which now abound, and the discursiveness of the material will probably make it pleasanter reading to those who are not already familiar with the subject. A large number of translations of original poems and descriptions serve to give the point of view and sense of the Egyptian mind.

Lychnos et Lucerna, Catalogue d'une collection de lampes. By A. OSBORNE and E. BRECCIA. 8vo, 18 pp., 7 plates. 1924. (Soc. Archéologique d'Alexandrie.)

This is a description of lamps collected by Dr. Alfred Osborne. They much resemble those published in "*Roman Ehnasya*," but not having been obtained with dated connections, they do not add to our fixed points. Besides some dating obtained at Ehnasya, reference should be made to some lamps absolutely dated by being found in burnt houses (Memphis III, pc. xl.). There are 89 specimens clearly photographed in these plates, mostly with figures of classical work, which are not so usual in the Fayum region. The boar, bull, ram, dolphin, and crescent seem to be probably legionary badges. We may thank Dr. Osborne for putting thus on record more material for future discussion whenever the subject is worked up.

PERIODICALS.

Annals of Archaeology and Anthropology, Liverpool. IX, Nos. 3-4.

With this number is issued the war-delayed plate from Vol. VII, with objects from the North Syrian Cemetery, see ANCIENT EGYPT, 1917, p. 41. The objects there figured appear to belong to about 650 to 450 B.C.; some certainly link on before 650, others of Scythian origin cannot be before that, some—as the Attic vases and coins—must come later than 500 B.C. It is very unfortunate that such a cemetery was plundered out, and the grouping lost, for had the groups been known it might have disentangled much of the influences of that very mixed age. The objects now published agree to the limits just stated, but do not help the dating further.

GRIFFITH, F. LL.—*Oxford Excavations in Nubia*. This is another welcome section of the account of Prof. Griffith's work, the previous part of which was noted in ANCIENT EGYPT, 1922, p. 60. These sections, and the continuation in the next year, really form a much larger work than many volumes which are published separately, with much over a hundred plates. It is a pity that such a standard publication on Nubian civilisation will not appear as a whole in our libraries.

This section deals with work at Napata. This was in 1912; the war supervening, further English work was arrested, and Dr. Reisner took up the ground. An historical outline is given of the Ethiopian dynasty; here it is said that "the Napata dynasty held Upper Egypt and claimed suzerainty over Middle Egypt. Scarcely a written record of the kings survives before Pi'ankhy son of Kashta." This might well be amplified by some statement of traces of Ethiopian control before Pi'ankhy's great stele; so far, they are not commonly known.

The Saite renaissance is attributed to the "choice of ancient models by the kings of Ethiopia," and justly so, as the Ethiopian work in Egypt is an enormous step above what the Egyptian was doing. Some further discussion of the causes of so great a change would be welcome from one who knows Ethiopian work so well. Where were the craftsmen trained? Was the movement first in the south or in the north?

A description of the sites around Merowe is given. This must not be confounded with the ancient capital Meroe which was far to the south; the name appears to mean "an irrigated place," and is known elsewhere. The ancient name of this district is Napata, and the great temple site is the neighbouring Mount Barkal.

The present report deals with the foundations of the Sanam temple and the treasury adjoining. In the next volume the Sanam cemetery is described. The temple was 225 feet long; the pylon 136 wide, and the body 95 and 89 feet wide. This is about the size of the temple of Khonsu at Karnak, but with an unusually wide pylon. The foundation deposits of Taharqa were found at the back corners, with small plaques of various materials with the name, pottery and beads.

There were no model tools, except mortar and pestle. Only small outer courses of walls remained, and no capitals were found among the ruins. Of the statues of the temple only fragments remained, one usurped by Paonkhy, and others of later Ethiopians. The remaining blocks of the walls show a procession with the sacred bark, and emblems, the queen heading a procession, attendants and musicians, cubical carts drawn by asses or mules, riders on mules, a row of figures of the Egyptian nomes. On the interior was an inscription of which parts of 180 columns remain. In this Taharqa described how he determined to go north to Thebes, and his festival there, also about founding a temple near Memphis. On the inner pylon was a frieze of kneeling captives of various lands.

The Treasury was a long row of chambers, seventeen in number, covering 850×150 feet. In these chambers had been a great store of valuable material of which an immense amount of fragments remained, including tusks of ivory ruined by fire. The chambers were 44×68 feet, with the roof supported by twelve stone columns. For some reason a second set of 63 smaller columns were placed regardless of the use of the other columns. The conditions under which these were required and placed are difficult to understand.

The small objects in the Treasury were of fine quality, but only fragments remained. The least usual were pieces of rock crystal and glass cups.

In Vol. X the cemetery of Sanam is described, which contained about 1,700 burials. It had been ruthlessly plundered anciently, but not in modern times. There were no ushabtis, and it is concluded that the people could not afford them; as gold and silver were buried, it looks rather as if the use of ushabtis was unknown for private persons. The chambers were often stairway tombs ending in a shallow cave; they differ from early stairway tombs by having end-on loculi, and thus resemble the late tombs of Denderah. The period is considered to be between 700 and 400 B.C. There were stone and pottery square altars of offering. The alabaster vases mostly agree to the dating, but one or two seem much older. The glazed pottery amulets are obviously of local style, and most of the scarabs also. The revival of interest in earlier times led to making imitations of some early types. The revival of circular scroll borders is remarkable; the silver flies and shells were also made again. Otherwise as a whole the objects are like those of the same period in Egypt.

CROWFOOT, GRACE M., and LING ROTH, H.—*Were the Ancient Egyptians conversant with Tablet-weaving?* This question has arisen over the origin of the girdle of Rameses III at Liverpool. Some years ago it was claimed that this must have been produced by tablet-weaving. However no instruments for this method have been found, and no pieces of work which must have been so produced. The girdle can be copied as to one side, but the other side defies tablet-weaving, at least it would require to work with 789 threads at once. Finally Mrs. Crowfoot, with a very simple loom of primitive type, has succeeded in exactly reproducing the pattern of the girdle. The work would be very slow, depending on much fingering and thought; but what is that to people who wrought the hard stone bowls and narrow-necked vases entirely by hand?

EMERY, W. B.—*Two Nubian Graves of the Middle Kingdom at Abydos.* These were found by Prof. Garstang in 1908; the contents are in Liverpool. The pottery is of the thin black and red ware, bowls with flaring top, like the Qurneh group now in Edinburgh.

Art and Archaeology, Dec., 1923, Feb., 1924.

A long article in these two numbers gives a general outline of the work of the Metropolitan Museum of New York, from 1907-1923, in Egypt. Much of this has been reported in this Journal year by year, but an outline of the whole may well be now stated. At Lisht, the north pyramid of Amenemhat I, and its temple, have been cleared. The temple plan differs from others; the limestone stele false door was found, now in Cairo, and the pink granite altar now in New York. No plans have yet been published, however. West of the pyramid was the cemetery, including the Senebtisi tomb, the only thing yet published. In 1908 the pyramid side was cleared for the entrance, and many blocks from IVth dynasty tombs were found re-used, also a great false door of granite for Amenemhat himself, used up for building. The plunderers had tunnelled down the side of the plugging. In the chamber at the end of the passage is a shaft thirty-five feet deep, supposed to lead to the burial, but all now under water.

In 1908 the pyramid of Senusert I to the south was examined. Also a party went to the Khargeh Oasis to examine the temple of Darius and the Christian necropolis.

In 1909 more was done at the Senusert pyramid, the sculptures along the causeway were cleared, and the plan of the temple.

In 1910 more clearance was done at the temple of Darius, and another party went to the Wady Natrun monasteries, which were completely planned.

From 1907 onward Mr. N. de G. Davies was engaged on the copying in facsimile the Theban tomb paintings, of which the tombs of Nekht and of Antef-aqer have been published.

In 1911 more of the monasteries of Wady Natrun were planned and more was done at the Darius temple. The palace of Amenhetep III at Birket Habu was cleared and planned in this and following years. The XIth dynasty tomb of Daga at Thebes was cleared, finding some original coloured reliefs and also Coptic inscriptions.

In 1913 a whole mastaba of the Vth dynasty official Perneb was removed from Saqqara to New York. At Thebes the causeway of the temple of Mentu-hetep was found and cleared. More was done round the north pyramid at Lisht, recording a late town which overlay the tomb shafts of the XIIth dynasty.

In 1914 work was around the south pyramid of Lisht, where the two statuettes of Senusert I were found (ANCIENT EGYPT, 1915, 145, 192).

In 1915 some tombs were cleared and planned, and more of the palace of Amenhetep III.

In 1916 the ground was examined between the two causeways of the temples of Deir el Bahri. In burials of the XVIIth and early XVIIIth dynasty the scarabs were found upon the third finger of the left hand. Several fine burials were obtained.

In 1917 and 1918 more was done on the palace, and also at Lisht. A foundation deposit there contained a sledge of cedar, probably used to transport the statute of Senusert in the funeral procession.

1919 a great tomb of the reign of Psamtek I, belonging to an official Pabasa, was excavated; it is one of the largest rock cuttings of that age, with a court sunk forty feet deep in the hill. From here came the great black basalt Taurt and shrine now in Cairo. A re-interred body of an infant son of Amenhetep I was also found.

In 1920 the clearance of the palace site of Amenhetep III was finished. The tomb of Mehenkwtetre was examined, and the chamber full of models was discovered, though the tomb was supposed to have been exhausted by other explorers. This series of models is the finest yet seen, both for number and detail of workmanship. It has been published to some extent in journals, but a complete colour reproduction must be issued. The complete burial of a retainer of that chieftain was found near by.

In 1921 further excavation was continued at the pyramid of Amenemhat I, again removing part of the village of the XXIInd dynasty, which overlay the mastabas of the XIIth. Two small objects are historically valuable, an ivory box lid with the name of King Khety inlaid with carnelian, and a glazed plaque of King Khenzer of the XIVth dynasty. The unfinished tomb of Mentuhetep IV and its platform were searched. Further study of the XIth dynasty temple of Deir el Bahri convinced Mr. Winlock that the tombs of the princesses were earlier than the visible structure, and he proceeded to open the two tomb shafts of Oatshet and Mayt. In the former was a splendid stone sarcophagus carved and painted, inside and out, with scenes of daily life and offering. Further exploration of the Coptic monasteries was continued.

In 1922 work was continued at Lisht and at the Mentuhetep temple of Deir el Bahri, where the foundation deposits were found, with not only samples of material but also tool models. A packet of family letters and accounts of the XIth dynasty were found in the tomb of a retainer. The tomb of Khety the master-spinner was recovered, which had been appropriated and re-lined with sculptures in the XXVIth dynasty. The important work of Mr. Davies was continued after the war, in the clearing and copying of the Theban tombs.

The staff was almost entirely diverted to the assistance of Mr. Carter when the tomb of Tutankhamen was found. This record covers a large number of important and interesting results, during twelve years of work. The world can but regret that the large staff engaged have not found it practicable to publish more than one tomb, from this great amount of discovery. There is a serious danger that fifty years hence there will be no permanent record of most of the excavations, which serve to fill the museums of the present time, and the benefit will not be reaped of that improvement in methods which distinguishes the present working from that of Belzoni and Caviglia.

Bulletin of the Metropolitan Museum of Art, December, 1923.

After an outline of the work on the tomb of Tutankhamen there is a full account of the Theban necropolis excavations. These have been along the great tombs of the cliff north of the Hatshepsut causeway. Any one who has seen that cliff will remember the lines of wall running up the slope, and dividing the several tomb properties. Here was cut the great tomb of Khety who was over the spinners, probably head of the royal linen factory, as his name is on the linen of Oashet in the XIth dynasty. The tomb lasted in good state to the XIXth dynasty, when Nebneteru the high priest of Amen recorded his visit. After that the chapel was wrecked by stone workers, but three passages in succession led to the burial chamber, which still retains a large part of the painted figures of the tomb furniture, like that on the wooden coffins of this age. A fragment of the top of the great stele has the tied lotus flowers, and in the slope of the arched top the *zed* pillars with sloped tops.

Another tomb had a serdab chamber for statues cut high up in the cliff above the tomb entrance. Here were found two squatting figures of the archer Neferhetep, one of quartzite the other of alabaster. In tomb pits of the XIth dynasty were found two mummies of dancing girls with tattooed patterns in diagonal squares of 5×4 spots, like the spot patterns on blue glazed figures of girls.

In clearing the ground between the causeways of the XIth dynasty temple and that of Hatshepsut, a large hollow was found in which rubbish had been thrown by Tehutmes III. Here were dumped the smashed up statues of Hatshepsut which had adorned her temple. Among these there were five complete figures of the queen in granite, kneeling with an offering vase. Many sketches by artists have been found here on flakes of limestone. Strangely this rubbish pit had been made in the flank of the Mentuhetep causeway; and after the XVIIIth dynasty that causeway wall had been replaced across the filled up pit.

An account of the development of the Akhenaten style is given by Mr. Davies, with examples of that king and Tiye worshipping Atmu. A figure of a royal nurse has four young princes on his knees, sons of Amenhetep III. One is named Akheperure, one was the heir Tehutmes who died young, one would be Akhenaten; may not the fourth have been Tutankhamen, who calls Amenhetep III his father? There is a hymn to Amen scrawled on the walls of tomb 139, dated in the third year of a king *Akheperure-Mery* . . . , whose personal name was *Neferneferuaten Mery* A suggestion is made that the queen of Akhenaten left him, and joined the Amen party, ruling at Thebes as a rival. There seems no room for a reign of three years just before or after Akhenaten. There is no date of his before year V, and it was supposed that he overlapped the last five years of his father as co-regent. But it might be that another son was co-regent, who died, and Akhenaten took over his years of reign into his own.

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The only Egyptian article in this number is that of Mr. Lewis on *Mother Worship in Egypt*. To much of this every one would agree. But other matters are stated to be connected with the Great Mother which are doubtful. "The primitive magico-religious attitude of the earliest Egyptians was brought into being by the passion for life . . . and this it was that ultimately led the primitive Egyptian into the belief of a Great Mother Deity." This hardly seems to fit with the known series of Protective Goddesses, Nut, then Isis, then Hathor, and lastly Mut. It was not an ultimate belief, but the most primitive. Then an early limestone figure from Hierakonpolis is said to be "of the god Min" and "intended to represent a female deity." Further "Min was at one time a female deity." It is hard to read this seriously. "Water, shell, procreation, mother-deity, father-deity. These are the ideas expressed by the Min statues." This is certainly an assertion which will take a great deal of proving. Then we read that a "girdle of shells has evolved into a girdle of Hathor beads." Pure assertion. The steatopygous figures are said to be the Great Mother. If so, why are they only found in the earliest graves? They obviously represented a race which was disappearing. We shall not get any further by such assertions and forced connections, only due to theorising on vague matters without any proved relationship, and without the ascertained historical basis.

NOTES AND NEWS.

It is generally recognised that white of egg was used by Egyptians to fix colours. The surfaces of the early tombs of the XVIIIth dynasty, and of temple sculptures of the XIIth dynasty will bear flooding and scrubbing, without any loss of the ochres and haematite, which were rubbed in and polished. How white of egg could be thus used seems difficult, as it is so thick and tenacious. An entry in the early proceedings of the Royal Society, 8 August, 1666, describes a Mr. Streeter preparing colours by "an egg beaten yolk and white together with a few shreddings of a fig tree branch, whereby the egg was reduced to an oily substance, without any tenacity or ropiness, so that it would be ductile, and fall on the pencil like oil." This is doubtless due to the well-known digestive power of fig juice, and as figs were common from prehistoric times in Egypt, it was very probably the mode of use by the Egyptians. Though Theophilus (*De diversis artibus*) often mentions the use of white of egg (*lib.* I, xv, xxv, xxxi, xxxii, xxxiv, xxxv), he does not seem to have known of the mixture with fig juice.

From time to time the data about the sinking of the Delta have been put on record in this Journal, and a new element should be stated. Along the coast at Bulkeley, east of Alexandria, there are water-laid strata with Roman rubbish up to 18 feet over sea level, and sloping beds of debris washed down from Roman ruins extend up to 23 feet over present sea. This seems to imply that the lowest sea level has been as high as 18 feet, and the wash of high seas extended to 23 feet. Hence the coast after sinking has risen again about 20 feet. The movement has, therefore, been greater than was supposed, and has been checked by some reversal.

It is not generally known that there are large remains of the canal which supplied Alexandria in Roman times. These are visible about two or three miles east of Kafr Dawar, to the north of the present canal. By the time a canal had become fenced by banks of clearings forty feet high, it was easier to shift it and dig a new canal, rather than carry the clearances higher. Thus four lines of canals were successively formed, and can be traced by banks sometimes half a mile long covered with vegetation. The cause of this amount of clearance about here must have been a flattening of the gradient, and as this part is between the present lakes of Mariut and Edku, it is obviously a low part of the course.

The law of 1883 by which Maspero encouraged excavations, and by which the Egyptian Government have profited so largely in discoveries, is now to be changed, and the Government will claim everything that is desired for Cairo. This will greatly reduce the amount of work done in future.

The British School expects to resume the work for the earliest civilisation, found in the Badari district; this will be carried on by Miss Caton Thompson, and (later) Mr. and Mrs. Brunton.

The Egypt Exploration Society will resume its work at Amarna, by Mr. Newton and Mr. Greenlees.

Mr. Starkey has passed on from the British School to work for Michigan University, seeking papyri, probably at Maabdeh.